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EXAMINER	
YOUNG, NICOLE M	

ART UNIT	PAPER NUMBER
2139	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/743,152	OYAMA, KAZUYA	
	Examiner	Art Unit	
	Nicole M. Young	2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41,43 and 45-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41, 43, and 45-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 September 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This communication is in response to the amendment of application 10/743,152 received 07/03/2007. Claims 1-41, 43, and 45-47 are pending. Claims 42 and 44 are cancelled. Claims 1-3, 14, 29, 38, 41, 42, 45 and 46 are amended.

Drawings

Corrected Drawings have been submitted and the objection is withdrawn.

Claim Objections

The claims have been amended and the claim objections are withdrawn

Claim Rejections - 35 USC § 112

The claims have been amended and the rejections are withdrawn.

Claim Rejections - 35 USC § 101

The 101 rejection of claim 4 is withdrawn.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 13-19, 21-23, 26, 30-33, 35, 39-41, 43 and 45-47 are rejected under 35 U.S.C. 102(e) as being anticipated by **Eskicioglu et al. (US 2002/01466125)** hereinafter Eskicioglu.

Claim 1, 13, 39 discloses an AV data transmitter comprising:

a plurality of receiver key signals with each AV data including a voice and a picture (paragraph [0011] audio/visual) encrypted and each of which is set for a single one of a plurality of AV data receiver permitted to communicate with the AV data transmitter (paragraph [0012] where the smart card is interpreted to be the receiver, the multiple public keys interpreted to be the receiver key signals, and the service transmitter is interpreted to be the conditional access service provider (CA service provider) in paragraph [0013] , wherein

the AV data transmitter selects a single one of the receiver key signals according to the single AV data receiver, ([0012] the CA service provider selects among the public keys according to smart card) the, to which the AV data transmitter is to transmit the AV data, from among the plurality of receiver key signals as a data

communication key signal, encrypts the AV data with the selected data communication key signal, so that only the single AV data receiver to with the AV data transmitter is to transmit the AV data can decrypt the AV data, and transmits the AV data to the AV data receiver (paragraph [0013] the service provider encrypts the data using the public key, the newly encrypted data is interpreted to be the selected data communication key signal, also paragraph [0103], keys used according to their geographic location).

Also in paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID.)

Claim 2 discloses the AV data transmitter according to claim 1, wherein

when the AV data transmitter receives a changeover request signal for requesting that the data communication key signal be changed over a different to one of the receiver key signals from a different one of the AV data receivers, the AV data transmitter determines that the different AV data receiver which has transmitted the changeover request signal is permitted to communicate with the AV data transmitter, and

when the different AV data receiver is permitted to communicate with the AV data transmitter, the AV data transmitter changes over the receiver key selected as the data communication key signal to the one receiver key signal of the different AV data receiver and transmits AV data encrypted with the correspondingly changed data

communication key signal to the different AV data receiver which has transmitted the changeover request signal. (The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 3 discloses an AV data transmitter comprising:

an encryption unit which encrypts AV data including a voice and a picture (paragraph [0011] audio/visual);

a first key signal storage unit which stores a data communication key signal used when the encryption unit encrypts the AV data (paragraph [0013] the service provider encrypts the data using the public key, the newly encrypted data is interpreted to be the selected data communication key signal);

a transmission/reception unit which transmits the AV data and which transmits and receives data (paragraph [0016]); and

a key signal changeover control unit which stores a plurality of receiver key signals set according to a plurality of AV data receivers permitted to communicate with the AV data transmitter, respectively, and which changes over a data communication key signal in the first key signal storage unit, wherein (Paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID.)

when the transmission/reception unit receives a changeover request signal for requesting that the data communication key signal be changed over to one of the receiver key signals according to one of the AV data receivers from the one AV data receiver, the AV data transmitter determines that the one AV data receiver which has transmitted the changeover request signal is one of the AV data receivers permitted to communicate with the AV data transmitter, and (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM.)

when the one AV data receiver is one of the AV data receivers permitted to communicate with the AV data transmitter, the key signal changeover control unit changes over the receiver key selected as the data communication key signal stored in the first key signal storage unit to the one receiver key signal according to the one AV data receiver (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM.).

Claim 4 discloses the AV data transmitter according to claim 3, further comprising:

a first decryption unit which decrypts the data received by the transmission/reception unit with the data communication key signal stored in the first key signal storage unit, wherein

the changeover request signal is encrypted with the one receiver key signal according to the one AV data receiver which transmits the changeover request signal, and

by determining with which of the plurality of receiver key signals stored in the key signal changeover unit the first decryption unit can decrypt the changeover request signal received by the transmission/reception unit, the AV data transmitter determines whether the one AV data receiver which has transmitted the changeover request signal is one of the AV data receivers permitted to communicate with the AV data transmitter (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 5 discloses the AV data transmitter according to claim 3, further comprising:

a second decryption unit which decrypts the changeover request signal encrypted with a specific key signal common to the AV data transmitter and the AV data receivers permitted to communicate with the AV data transmitter, wherein

by determining whether the second decryption unit can decrypt the changeover request signal received by the transmission/reception unit with the specific key signal, the AV data transmitter determines whether the one AV data receiver which has transmitted the changeover request signal is one of the AV data receivers permitted to communicate with the AV data transmitter (Paragraph [0016] where the private key is interpreted to be the second decryption specific key signal).

Claim 6 discloses the AV data transmitter according to claim 3, wherein

when the AV data transmitter receives the changeover request signal and changes over the data communication key signal, the transmission/reception unit transmits a state change signal for changing an operation state of the one AV data receiver which includes the one receiver key signal that is to serve as the data communication key signal stored in the first key signal storage unit as the data communication key signal until changing over the data communication key signal (paragraph [0043 in which the user cancels a request, therefore changing the operating state).

Claim 7 discloses the AV data transmitter according to claim 3, wherein

the transmission/reception unit receives, from one of the AV data receivers, a change request signal for requesting that the receiver key signals stored in the key signal changeover control unit be changed, and

when the AV data transmitter determines that the one AV data receiver which has transmitted the change request signal is one of the AV data receivers permitted to communicate with the AV data transmitter, the AV data transmitter changes the receiver key signal according to the one respective AV data receivers and stored in the key signal changeover control unit to the receiver key signal recognized by the changeover request signal (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 8 discloses the AV data transmitter according to claim 3, wherein

the AV data transmitter has a fixed mode in which the data communication key signal stored in the first key signal storage unit cannot be changed over (paragraph [0012] where there is only one public key)..

Claim 9, 46, 47 discloses the AV data transmitter according to claim 8, wherein

assuming that a changeover determination signal for determining whether the data communication key signal in the first key signal storage unit can be changed over is transmitted from the one AV data receiver, and that

the transmission/reception unit receives the changeover determination signal,

when the changeover determination signal is transmitted from the one AV data receiver permitted to communicate with the AV data transmitter and the AV data transmitter is not in the fixed mode, the transmission/reception unit transmits a communication permission signal indicating that the one AV data receiver can communicate with the AV data transmitter, (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM. The authentication is interpreted to be the permission signal.), and when the changeover determination signal is transmitted from the one AV data receiver permitted to communicate with the AV data transmitter and the AV data transmitter is in the fixed mode, the transmission/reception unit transmits a communication prohibition signal indicating that the one AV data receiver cannot communicate with the AV data transmitter (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM. The communication prohibition signal is [0043] where the user cancel request is the communication prohibition signal).

Claim 10 discloses the AV data transmitter according to claim

9, wherein

when the transmission/reception unit receives the changeover determination signal, the AV data transmitter determines the A data receiver that is currently transmitting the AV data based on the data communication key signal stored in the first key signal storage unit and transmits information on the one AV data receiver thus determined together with the communication permission signal or the communication prohibition signal (paragraph [0013])

Claim 14, 29, 40 discloses an AV data receiver comprising:

a transmission/reception unit (paragraph [0016]) which receives encrypted AV data such as a picture or a voice and which transmits and receives data (paragraph [0011] audio/visual);

a first decryption unit which decrypts the AV data;

a first key signal storage unit which stores a receiver key signal with which the first decryption unit decrypts the AV data (paragraph [0013] smart card decrypts); and

a data generation unit which generates the data to be transmitted (paragraph [0013] conditional access provider sends data and CA entitlement message encrypted), wherein

the data generation unit generates a changeover request signal for requesting that a key signal be changed over to the receiver key signal of the AV data receiver as a data communication key signal for encrypting the AV data, and the transmission/reception unit transmits the changeover request signal to the AV data transmitter which permits the AV data receiver to communicate with the AV data

transmitter by storing the receiver key signal of the AV data receiver as one of a plurality of receiver key signals (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM. The authentication is interpreted to be the permission signal).

Claim 15 discloses the AV data receiver according to claim 14, further comprising:

an encryption unit which encrypts the signal generated by the data generation unit with the receiver key signal stored in the first key signal storage unit, wherein

the changeover request signal generated by the data generation unit is encrypted with the receiver key signal by the encryption unit and transmitted from the transmission/reception unit.

Claim 16 discloses (Original) the AV data receiver according to claim 14, further comprising:

an encryption unit which encrypts the signal generated by the data generation unit with a specific key signal common to the AV data transmitter and the AV data receiver permitted by the AV data transmitter to communicate with the AV data transmitter, wherein

the changeover request signal generated by the data generation unit is encrypted with the specific key signal by the encryption unit and transmitted from the

transmission/reception unit (paragraph [0012] where every device uses the same public key).

Claim 17 discloses the AV data receiver according to claim 16, further comprising:

a second decryption unit which decrypts a signal other than the AV data received by the transmission/reception unit with the specific key signal (paragraph [0016 where there are multiple service providers).

Claim 18 discloses the AV data receiver according to claim 14, wherein

when the data communication key signal is changed over in the AV data transmitter and the AV data receiver receives the AV data from the AV data transmitter before the data communication key signal is changed over, the transmission/reception unit receives a state change signal for changing an operation state of the AV data receiver from the AV data transmitter and the operation state of the AV data receiver is changed (paragraph [0043 in which the user cancels a request, therefore changing the operating state).

Claim 19 discloses the AV data receiver according to claim 18, wherein

when the transmission/reception unit receives the state change signal, the AV data receiver controls an operation state of an external device including an AV data reproduction apparatus, which reproduces the AV data and which is connected to the

AV data receiver by a cable, to be changed (paragraph [0022] states a Local Area Network).

Claim 21 discloses the AV data receiver according to claim 14, further comprising

a key signal generation unit which generates the receiver key signal (paragraphs [0012] and [0013]) , wherein

the receiver key signal generated by the key signal generation unit is applied to the data generation unit, the data generation unit generates a change request signal for requesting that the receiver key signal stored in the AV data transmitter be changed over to the receiver key signal generated by the key signal generation unit, and the transmission/reception unit transmits the generated change request signal (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 22 discloses the AV data receiver according to claim 14,

wherein

the data generation unit generates a changeover determination signal for determining whether the data communication key signal of the AV data transmitter can be changed over, and the transmission/reception unit transmits the generated changeover determination signal (paragraph [0106] and [0107] the ECM is interpreted

to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 23 discloses the AV data receiver according to claim 22, further comprising:

a communication state determination unit which indicates that communication can be held when the transmission/reception unit receives a communication permission signal transmitted from the AV data transmitter and indicating that the communication can be held, and which indicates that the communication cannot be held when the transmission/reception unit receives a communication prohibition signal transmitted from the AV data transmitter and indicating that the communication cannot be held (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM. The communication prohibition signal is [0043] where the user cancel request is the communication prohibition signal).

Claim 26 discloses the AV data receiver according to claim 23, wherein

when the transmission/reception unit receives a non-communication target signal indicating that the communication is prohibited from the AV transmitter which has

received the changeover determination signal, the communication state determination unit shows that the AV data receiver is a non-communication target receiver (column 4 lines 41-58 of Freeman teach a display for the transmission).

Claim 30 discloses the AV data wireless communication system according to claim 29, wherein

the AV data receiver transmits a changeover request signal for requesting that the data communication key signal be changed over to one of the receiver key signals according to the AV data receiver,

when the AV data transmitter receives the changeover request signal, the AV data transmitter determines that the AV data receiver which has transmitted the changeover request signal is the AV data receiver permitted to communicate with the AV data transmitter,

when the AV data transmitter determines that the AV data receiver which has transmitted the changeover request signal is the AV data receiver permitted to communicate with the AV data transmitter, the AV data transmitter changes over the receiver key selected as the data communication key signal to the one receiver key signal according to the AV data receiver, and

the AV data transmitter transmits the AV data encrypted with the correspondingly changed data communication key signal to the AV data receiver which has transmitted the changeover request signal (paragraph [0012] where the smart card is interpreted to be the receiver, the multiple public keys interpreted to be the receiver key signals, and

the service transmitter is interpreted to be the conditional access service provider (CA service provider in paragraph [0013], paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 31 discloses the AV data wireless communication system according to claim 30, wherein

the changeover request signal is encrypted with the one receiver key signal (paragraph [0012] where there is one public key).

Claim 32 discloses the AV data wireless communication system according to claim 30, wherein

the changeover request signal is encrypted with a specific key signal common to the AV data transmitter and the AV data receiver permitted by the AV data transmitter to communicate with the AV data transmitter(paragraph [0012] where there is one public key).

Claim 33 discloses the AV data wireless communication system according to claim 29, wherein

when the AV data transmitter changes over the receiver key selected as the one data communication key signal to a first receiver key signal according to a first AV data receiver which has transmitted the changeover request signal (paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID),

then the AV data transmitter transmits a state change signal for changing an operation state of a second AV data receiver to the second AV data receiver so as to change the operation state of the second AV data receiver according to a second receiver key signal used as the data communication key signal before changeover, and

the second AV data receiver receives the state change signal and the operation state of the second AV data receiver is changed (The communication prohibition signal is [0043] where the user cancel request is the communication prohibition signal).

Claim 35 discloses the AV data wireless communication system according to claim 29, wherein

the AV data receiver changes the one receiver key signal, generates and transmits a change request signal, including the receiver key signal as information, for requesting that the one receiver key signal in the AV data transmitter be changed, and

when the AV data transmitter receives the change request signal, the AV data transmitter changes the one receiver key signal stored according to the AV data receiver which has transmitted the change request signal to the receiver key signal

determined by the change request signal, Eskicioglu teaches a CA service provider in paragraph [0013], paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM.

Claim 41 discloses an AV data wireless communication system comprising:

a first AV data receiver storing a first encryption key;

a second AV data receiver storing a second encryption key;

and (paragraph [0104] where each area has their own public key)

an AV data transmitter storing said first and second encryption keys;

wherein the AV data transmitter selects one of the first and second AV data receivers, encrypts AV data using the one of the first and second encryption keys corresponding to the selected one of the first and second AV data receivers, and transmits the encrypted AV data (paragraph [0105] where the Princeton area user has a set-top box with all the public keys for the surrounding areas).

Claim 42 (cancelled)

Claim 43 discloses a method of transmitting AV data comprising the steps of:

providing an AV data transmitter storing a plurality of encryption keys for encrypting AV data, each of the encryption keys corresponding to one of a plurality of AV receivers;

selecting one of the plurality of receivers;

selecting an encryption key corresponding to the selected AV receiver;

encrypting AV data with the selected encryption key; and

transmitting the encryption data to the selected AV receive (paragraph [0105] where the Princeton area user has a set-top box with all the public keys for the surrounding areas, and paragraph [0105] where the Princeton area user has a set-top box with all the public keys for the surrounding areas, the user selects the public key to encrypt with depending on the corresponding geographical location)r

receiving a request to change the encryption key used to encrypt AV data to a different encryption key;

determining whether the different encryption key is one of the stored plurality of encryption keys; and

if the different encryption key is one of the stored plurality of encryption keys, changing the encryption key used to encrypt data to the different encryption key, encrypting AV data using the different encryption key and transmitting the encrypted data (CA service provider in paragraph [0013], paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is

specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM).

Claim 44 cancelled

Claim 45 discloses the method of claim 44 including the additional step of sending a state change signal from the AV transmitter to change a state of the one of the plurality of AV receivers that sent the encrypted request that the AV transmitter change the encryption key used to encrypt data to the different encryption key (paragraph [0043] in which the user cancels a request, therefore changing the operating state).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 12, 20, 24, 25, 27, 28, 34, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable **over Eskicioglu et al. (US 2002/01466125)** hereinafter

Eskicioglu as applied to **claims 1-10, 13-19, 21-23, 26, 30-33, 39-47** above, and further in view of **Freeman et al (US 7,224,797)** hereinafter Freeman.

Claim 11 discloses the AV data transmitter according to claim 9, wherein

Eskicioglu teaches claim 9 as rejected above. Eskicioglu does not teach, but Freeman teaches when the transmission/reception unit receives the changeover determination signal and the changeover determination signal is transmitted from an AV data receiver which is not permitted to communicate with the AV data transmitter, the AV data transmitter transmits a non-communication target signal indicating that the AV data receiver is not a communication target receiver in column six lines 1-3.

It would be obvious for someone of ordinary skill in the art at the time of invention that when a device is not permitted to communicate the transmitter sends a notification. The motivation would be to alert the device it is not authenticated.

Claim 12 discloses the AV data transmitter according to claim

3, wherein

Eskicioglu teaches claim 3 as rejected above. Eskicioglu does not teach but Freeman teaches the AV data transmitter sets an AV data transmission period in which the AV data is transmitted for each cycle, and receives the changeover request signal in a period other than the AV data transmission period in the cycle in column 6 lines 15-23 where the set-top box is reset interrupting the cycle. It would be obvious to someone of ordinary skill in the art at the time of invention to reset the device. The motivation would be to reinitialize the receiver.

Claim 20 discloses the AV data receiver according to claim 14, wherein Eskicioglu teaches claim 14 as rejected above. Eskicioglu does not teach but Freeman teaches when the AV data receiver is operated to be turned on, the data generation unit generates the changeover request signal, the transmission/reception unit transmits the generated changeover request signal, and an external device including an AV data reproduction apparatus, which reproduces the AV data and which is connected to the AV data receiver by a cable, is turned on in column 5 lines 50-55 step 98. It would be obvious to someone of ordinary skill in the art at the time of invention to alert the transceiver or receiver of the changeover request signal. The motivation would to get the earliest security possible.

Claim 24 discloses the AV data receiver according to claim 22, wherein Eskicioglu teaches claim 22 as rejected above. Eskicioglu does not teach but Freeman teaches when the transmission/reception unit receives a communication permission signal transmitted from the AV data transmitter and indicating that communication can be held, the AV data receiver controls an AV reproduction apparatus connected to the AV data receiver by a cable so as to display a notification that the communication can be held, and when the transmission/reception unit receives a communication prohibition signal transmitted from the AV data transmitter and indicating that communication cannot be held, the AV data receiver controls the AV reproduction apparatus so as to display a notification that the communication cannot be held in column 4 lines 41-58, a

display for the transmission. It would be obvious to someone of ordinary skill in the art at the time of invention to display the non-communication signal. The motivation would be to alert the user.

Claim 25 discloses the AV data receiver according to claim 24, wherein

Eskicioglu teaches claim 22 as rejected above. Eskicioglu does not teach but Freeman teaches the transmission/reception unit receives information representing the AV data receiver to which the AV data transmitter is currently transmitting the AV data as well as the communication permission signal or the communication prohibition signal, and the AV data receiver controls the AV reproduction apparatus so as to display the AV data receiver to which the AV data transmitter is currently transmitting the AV data in paragraph [0090], cancel a purchase by using a menu displayed. It would be obvious to one of ordinary skill in the art at the time of invention to cancel a transmission using a display. The motivation would be to allow the user to graphically cancel the transmission.

Claim 27 discloses the AV data receiver according to claim 24, wherein

Eskicioglu teaches claim 22 as rejected above. Eskicioglu does not teach but Freeman when the transmission/reception unit receives a non-communication target signal indicating that the communication is prohibited from the AV transmitter which has received the changeover determination signal, the AV data receiver controls the AV reproduction apparatus so as to display the notification that the AV data receiver is a

non-communication target receiver in paragraph [0090], cancel a purchase by using a menu displayed. It would be obvious to one of ordinary skill in the art at the time of invention to cancel a transmission using a display. The motivation would be to allow the user to graphically cancel the transmission.

Claim 28 disclosesthe AV data receiver according to claim 14, wherein

Eskicioglu teaches claim 14 as rejected above. Eskicioglu does not teach but Freeman teaches the AV data receiver sets an AV data transmission period in which the AV data is received for each cycle, and transmits the changeover request signal in a period other than the AV data transmission period in the cycle in column 6 lines 15-23 where the set-top box is reset interrupting the cycle where the set-top box is reset interrupting the cycle. It would be obvious to someone of ordinary skill in the art at the time of invention to reset the device. The motivation would be to reinitialize the receiver.

Claim 34 discloses the AV data wireless communication system according to claim 33, wherein

Eskicioglu teaches claim 33 as rejected above. Eskicioglu does not teach but Freeman teaches by turning on the first AV data receiver, the changeover request signal is transmitted in column 5 lines 50-55 step 98. It would be obvious to someone of ordinary skill in the art at the time of invention to alert the transceiver or

receiver of the changeover request signal. The motivation would to get the earliest security possible.

Claim 36 discloses the AV data wireless communication system according to claim 29, wherein

Eskicioglu teaches claim 29 as rejected above the AV data receiver transmits a changeover determination signal for determining whether the data communication key signal can be changed over,

and when the AV data transmitter which has received the changeover determination signal determines that communication can be held, the AV data transmitter transmits a communication permission signal indicating that the communication can be held in CA service provider in paragraph [0013], paragraph [0106] and [0107] the ECM is interpreted to be the receiver key signal, The transceiver then takes the ECM id and looks for an entry in the ECM Key ID field. The key to decrypt the audio visual data is specified from the ECM Key ID. The smart card determines if the user is authorized and then decrypts based on the ECM;

Eskicio does not teach but Freeman teaches when the AV data transmitter which has received the changeover determination signal determines that communication cannot be held, the AV data transmitter transmits a communication prohibition signal indicating that the communication cannot be held in column six lines 1-3. It would be obvious to one of ordinary skill in the art at the time of invention to transmit a non-

communication notification to the receiver. The motivation is the receiver is not authenticated.

Claim 37 discloses the AV data wireless communication system according to claim 36, wherein

Eskicioglu teaches claim 29 as rejected above. Eskicio does not teach but Freeman teaches when the AV data receiver, which has transmitted the changeover determination signal, is not the AV data receiver permitted to communicate with the AV data transmitter, the AV data transmitter which has received the changeover determination signal transmits a non-communication target signal indicating that the AV data receiver is not a communication target receiver in column six lines 1-3). It would be obvious to one of ordinary skill in the art at the time of invention to transmit a non-communication notification to the receiver. The motivation is the receiver is not authenticated.

Claim 38 discloses (Original) the AV data wireless communication system according to claim 29, wherein

Eskicioglu teaches claim 29 as rejected above. Eskicio does not teach but Freeman teaches an AV data transmission period in which the AV data is transmitted/received for each cycle is set, and the changeover request signal is transmitted and received in a period other than the AV data transmission period in the cycle in column 6 lines 15-23 where the set-top box is reset interrupting the cycle where

the set-top box is reset interrupting the cycle. It would be obvious to someone of ordinary skill in the art at the time of invention to reset the device. The motivation would be to reinitialize the receiver.

Note: Examiner has pointed out particular references contained in the prior arts of record and in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable to the limitations of the claims. It is respectfully requested from the applicant, in preparing for response, to consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the Examiner.

Response to Arguments

102(e) rejections

Regarding claim 1, the Applicant argues that Eskicioglu does not disclose storing receiver key signals associated with a single one of a plurality of AV receivers. The Examiner respectfully disagrees. Eskicioglu paragraph [0013] the service provider encrypts the data using the public key, the newly encrypted data is interpreted to be the

selected data communication key signal, also paragraph [0103], keys used according to their geographic location. Each smart card, as in paragraph [0013], has a different public key. The Applicant argues the Eskicioglu does not disclose encrypting AV data so that only a single AV data receiver associated with a particular key code can decrypt that data. The Examiner respectfully disagrees. Each smart card is purchasing television content for the user. Therefore each user receives the content it purchases and decrypts the content.

Regarding claim 2, the Applicant argues that Eskicioglu does not disclose the AV data transmitter receiving a changeover request signal. The Examiner respectfully disagrees. The examiner interprets two changeover requests in the Eskicioglu system. The changeovers occur when the service provider is transmitting a request for another user and when the permissions in the smart card allow the user to receive local and national content, which have different public keys. These permissions are based on if the client has enough credit stored on the smart card.

Regarding claim 3, the Applicant argues that Eskicioglu does not disclose the changeover signals being authorized. This is shown above with the permissions to view local and national content.

Claims 4-12 depend from claim 3 and are rejected for the same reason as claim 3.

Regarding claim 13, the Applicant argues that the limitations of claim 1 are with respect to the receiver and therefore not related to claim 1 which is in regard to the transmitter. The Examiner respectfully disagrees. The Examiner states that both the

transmitter and receiver in Eskicioglu also receiver and transmit, respectfully. The service provider receives a request from the smart card. The service card request changeover signal would be the same as above, where the smart card requests local content versus national content.

Regarding claim 14 the Applicant argues that Eskicioglu does not disclose a changeover signal request from the receiver. The Examiner respectfully disagrees. This is shown in the above rejection of claim 13 with respect to the difference in content.

Claims 15-28 depend from claim 14 and are rejected for the same reason as 14.

Regarding claim 29, the Applicant argues that Eskicioglu does not disclose storing receiver key signals associated with a single one of a plurality of AV receivers. The Examiner respectfully disagrees. Eskicioglu paragraph [0013] the service provider encrypts the data using the public key, the newly encrypted data is interpreted to be the selected data communication key signal, also paragraph [0103], keys used according to their geographic location. Each smart card, as in paragraph [0013], has a different public key. The Applicant argues the Eskicioglu does not disclose encrypting AV data so that only a single AV data receiver associated with a particular key code can decrypt that data. The Examiner respectfully disagrees. Each smart card is purchasing television content for the user. Therefore each user receives the content it purchases and decrypts the content.

Regarding claim 30, the Applicant argues that Eskicioglu does not disclose the AV data transmitter receiving a changeover request signal. The Examiner respectfully disagrees. The examiner interprets two changeover requests in the Eskicioglu system.

The changeovers occur when the service provider is transmitting a request for another user and when the permissions in the smart card allow the user to receive local and national content, which have different public keys. These permissions are based on if the client has enough credit stored on the smart card.

Claims 31-38 depend from claim 30 and are rejected for the same reason as claim 30.

Regarding claim 39, the Applicant argues that Eskicioglu does not disclose storing receiver key signals associated with a single one of a plurality of AV receivers. The Examiner respectfully disagrees. Eskicioglu paragraph [0013] the service provider encrypts the data using the public key, the newly encrypted data is interpreted to be the selected data communication key signal, also paragraph [0103], keys used according to their geographic location. Each smart card, as in paragraph [0013], has a different public key. The Applicant argues the Eskicioglu does not disclose encrypting AV data so that only a single AV data receiver associated with a particular key code can decrypt that data. The Examiner respectfully disagrees. Each smart card is purchasing television content for the user. Therefore each user receives the content it purchases and decrypts the content.

Regarding claim 40, the Applicant argues that Eskicioglu does not disclose the AV data transmitter receiving a changeover request signal. The Examiner respectfully disagrees. The examiner interprets two changeover requests in the Eskicioglu system. The changeovers occur when the service provider is transmitting a request for another user and when the permissions in the smart card allow the user to receive local and

national content, which have different public keys. These permissions are based on if the client has enough credit stored on the smart card.

Regarding claim 41, the Applicant argues that Eskicioglu does not disclose a second data receiver. The Examiner respectfully disagrees. Eskicioglu figure 1 shows two receivers, viewer 1 with DTV 40a and viewer 2 with DTV 40b.

Regarding claims 42 and 43 the Applicant argues that Eskicioglu does not disclose the step of requesting that an AV transmitter change an encryption key. The Examiner respectfully disagrees. Each type of different content, ex. local and national, has a different public key. When the user wishes to view different content it would request the transmitter to use the public key of the different content.

Claim 45-47 depend from claim 43 and are rejected for the same reason as claim 43.

Claim Rejections - 35 USC § 103

Regarding claims 11 and 12, the Applicant argues that Freeman does not disclose the shortcomings with respect to Eskicioglu. The Examiner respectfully disagrees. Regarding claim 11, Eskicioglu does not teach, but Freeman teaches when the transmission/reception unit receives the changeover determination signal and the changeover determination signal is transmitted from an AV data receiver which is not permitted to communicate with the AV data transmitter, the AV data transmitter

transmits a non-communication target signal indicating that the AV data receiver is not a communication target receiver in column six lines 1-3.

It would be obvious for someone of ordinary skill in the art at the time of invention that when a device is not permitted to communicate the transmitter sends a notification. The motivation would be to alert the device it is not authenticated.

Regarding claim 12, Eskicioglu does not teach but Freeman teaches the AV data transmitter sets an AV data transmission period in which the AV data is transmitted for each cycle, and receives the changeover request signal in a period other than the AV data transmission period in the cycle in column 6 lines 15-23 where the set-top box is reset interrupting the cycle. It would be obvious to someone of ordinary skill in the art at the time of invention to reset the device. The motivation would be to reinitialize the receiver.

Regarding claims 20, 24, 25, 27, and 28, the Applicant argues that Freeman does not disclose the shortcomings in Eskicioglu with respect to claim 14. The Examiner respectfully disagrees. Claims 20, 24, 25, 27, and 28 are rejected for the same reasons as claim 14 with the addition of the Freeman reference as stated in the above rejection.

Regarding claims 36-38 the Applicant argues that Freeman does not disclose the shortcomings in Eskicioglu with respect to claim 29. The Examiner respectfully disagrees. Claims 36-38 are rejected for the same reasons as claim 29 with the addition of the Freeman reference as stated in the above rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole M. Young whose telephone number is 571-270-1382. The examiner can normally be reached on Monday through Friday, alt Fri off, 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NMY
12/11/2007

SYED A. ZIA
PRIMARY EXAMINER